



Fact Sheet

Date: March 2000

NPDES Permit Number: **AK-004038-0**

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The U.S. Environmental Protection Agency (EPA)
Plans To Modify A Wastewater Discharge Permit For:

Usibelli Coal Mine, Inc.
P.O. Box 1000
Healy, Alaska 99743
ph. 907-683-2226

This will also serve as

NOTICE OF STATE CERTIFICATION.

EPA Proposes NPDES Permit Modification.

EPA proposes to modify a *National Pollutant Discharge Elimination System* (NPDES) Permit to Usibelli Coal Mine, Inc. in Healy, Alaska. The proposed modified permit sets conditions on the discharge of pollutants from a new wastewater treatment impoundment to Hoseanna (Lignite) Creek.

This Fact Sheet includes:

- information on public comment, public hearing, and appeal procedures,
- a description of the facility,
- a description of proposed effluent limitations and monitoring requirements, and other conditions,
- a map and description of the new discharge.

The State of Alaska certification.

EPA has requested that the Alaska Department of Environmental Conservation (ADEC) certify the NPDES permit for this operation under section 401 of the Clean Water Act (CWA).

EPA invites comments on the proposed permit.

EPA will consider all substantive comments before issuing a final permit. Those wishing to comment on the proposed modified permit may do so in writing by the expiration date of the Public Notice. After the Public Notice expires, and all comments have been considered, EPA's regional Office of Water Director will make a final decision regarding permit modification.

If no substantive comments are received, the tentative conditions in the proposed permit will become final, and the permit will become effective upon issuance. If comments are received, the permit will become effective 30 days after the issuance date, unless a request for an evidentiary hearing is submitted within 30 days.

Persons wishing to comment on State Certification should submit written comments by the public notice expiration date to the Alaska Department of Environmental Conservation, 610 University Avenue, Fairbanks, Alaska 99709.

Documents are available for review.

The proposed modified NPDES permit and fact sheet can be reviewed at EPA's Regional Office in Seattle between 8:30 a.m. and 4:00 p.m., Monday through Friday. This material is also available for inspection and copying at the following places in Alaska:

USEPA Alaska Operations Office
Federal Building, Room 537
222 West 7th Avenue
Anchorage, Alaska 99513-7588
Telephone: (800) 781-0983
(Within Alaska)

USEPA Alaska Operations Office
410 Willoughby Avenue, Suite 100
Juneau, Alaska 99801
Telephone: (907) 586-7619

ADEC Watershed Development Program
Air and Water Quality Division
610 University Avenue
Fairbanks, AK 99709

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A. APPLICANT

NPDES Permit No.: AK-004038-0
Usibelli Coal Mine, Inc (UCM)

Mailing Address:

P.O. Box 1000

Healy, Alaska 99743

Facility Location:

Poker-Gold Run Pass/Two Bull Ridge Coal
Mines

Facility contact: Bartly K. Coiley, Civil Engineer

B. FACILITY ACTIVITY

UCM operates year round, and is located within the Alaska Range near the town of Healy. The mine was founded in 1943 by Emil Usibelli, and it has a work force of approximately 120 employees. Domestically, the coal produced at Usibelli Coal Mine, Inc. is used to power six cogeneration plants in the interior of Alaska, supplying electricity and steam to approximately 75,000 customers. Internationally, the mine ships coal to the Republic of Korea from the Seward Port.

UCM surface mines for coal recovery through the use of dragline and truckshovel methods. Over 1.6 million tons of coal per year are produced from three mining areas: Gold Run Pass, Poker Flats and Two Bull Ridge (upcoming). The Gold Run Pass mining area is in the final stages of producing coal and the revegetation process is well underway. The Poker Flats mining area produces the majority of the 1.6 million tons of coal per year, and it is currently being revegetated as individual cuts are completed. The Two Bull Ridge mining area will produce coal starting in 2000.

UCM's NPDES permit was reissued in 1998. Since that time, the mining plan was changed to include a valley fill in Badlands Creek. The fill consists of two parts. First, the down-valley portion of the fill will be an engineered toefill consisting of 1.9 million bank cubic yards of drier and stronger material, while the up-valley portion of the fill will consist of moister and weaker materials.

An underdrain system has been proposed. It consists of three parts. First, the main underdrain runs the length of the valley and is constructed with 2" to 4" cobble wrapped in geocloth ranging in cross-sectional area from 13 square feet to 9 square feet. Second, the finger drains will consist of cobble placed in 2 square foot channels wrapped in geocloth, these will extend from the main underdrain to each seep or spring flowing 1 gallon per minute (gpm) or greater. Third, a blanket drain of gravel will be placed to a thickness of two feet that covers the entire flat valley floor to the valley sidewalls also extending to any seeps or springs flowing less than 1 gpm.

UCM plans to divert surface water away from and around the fill area during construction. After completion of the fill, there will be two permanent channels to divert the water around the fill to prevent placed spoil in the toe fill from becoming saturated.

Drainage from the fill will be collected in a series of two settling ponds downgradient of the toe of the fill. The second pond will discharge directly into Hoseanna Creek. It is this discharge point that is proposed to be added to the NPDES permit.

C. RECEIVING WATER

Hoseanna Creek is classified in the Alaska Water Quality Standard Regulations (18 AAC 70) for use as water supply, water recreation, and growth and propagation of fish, shellfish, other aquatic life, and wildlife. This means the permit must be designed to provide for compliance with the strictest water quality standard by comparison of the uses.

D. EFFLUENT LIMITATIONS

The chemical specific substances limited in this permit are based on analyses which resulted in the promulgation of effluent limitations for the Coal Mining industrial category found in 40 CFR 434 (47 FR 45382, October 13, 1983).

EPA acknowledges that total suspended solids cannot be consistently controlled during precipitation events. Alternative effluent limitation for periods of precipitation are provided by the coal mining point source effluent guidelines, 40 CFR 434.63, and are incorporated into this permit. A precipitation event is defined as follows:

- X Measurable rainfall during a 24-hour period;
- X The time period of snowmelt (occurring at any time there is snow on the ground within the watershed and the temperature is above 0EC).

Effluent limitations dependent on a rainfall event of 2 inches within a 24-hour period are designated in accordance with the guidelines. The 2 inches of rainfall specification was obtained as the value of the 10-year 24-hour storm event for the approximated location the mine area near Healy, Alaska.

The following tables include the effluent limitations included in the permit for the new discharge point (see page 3 of the permit):

Table 1a - Effluent Limitations Dry Weather Periods				
Parameters	Limits on Daily Discharge		Monitoring Requirements	
	Daily Maximum	Average Monthly	Frequency	Sample Type
Flow	N/A		Weekly	Grab
Iron, Total Recoverable	6.0 mg/L	3.0 mg/L	2/month	Grab
TSS	70 mg/L	35 mg/L	Weekly	Grab
pH	6.0 - 8.5 Std. Units		Weekly	Grab

Table 1b - Effluent Limitations			
Medium Precipitation (Under 2 inches Rainfall in 24 hrs) and Snowmelt Periods*			
The rainfall amount may be determined by the tipping bucket measurement taken at the facility weather station.			
Parameters	Limits on Daily Discharge	Monitoring Requirements	
	Daily Maximum	Frequency	Sample Type
Flow	N/A	**	Grab
Settleable Solids	0.5 mL/L	**	Grab
pH	6.0 - 8.5 Std. Units	**	Grab
<p>*No discharge should occur if the permittee is unable to monitor the effluent.</p> <p>**Monitoring of a discharge event occurring during a precipitation event is as follows: once within 24 hours of the beginning of the discharge event and weekly thereafter if the discharge event lasts longer than 7 days.</p>			

Table 1c - Effluent Limitations			
High Precipitation Periods (Over 2 inches Rainfall in 24 hrs.)*			
The rainfall amount may be determined by the tipping bucket measurement taken at the facility weather station.			
Parameters	Limits on Daily Discharge	Monitoring Requirements	
	Daily Maximum	Frequency	Sample Type
Flow	N/A	**	Grab
pH	6.0 - 8.5 Std. Units	**	Grab
<p>*No discharge should occur if the permittee is unable to monitor the effluent.</p> <p>**Monitoring of a discharge event occurring during a precipitation event is as follows: once within 24 hours of the beginning of the discharge event and weekly thereafter if the discharge event lasts longer than 7 days</p>			

E. MONITORING REQUIREMENTS

1. Effluent Monitoring

The Clean Water Act requires that monitoring be included in permits to determine compliance with effluent limitations (see page 20 of the permit). Monitoring may also be required to gather data for future effluent limitations or to monitor effluent impacts on receiving water quality. The reissued permit introduced additional monitoring in order to evaluate the need for water quality-based permit limits. This will be accomplished through the receiving water and effluent sampling program which calls for two sets of samples each year, at varying seasons, in order to yield statistically relevant data. The Permittee is responsible for conducting the monitoring and for reporting results to EPA.

2. Water Quality Monitoring Program Requirements

In order to obtain statistically relevant data, it was decided in the reissued permit to require a minimum of 10 water quality data sets for each of the eight discharges over the life of the permit. The seasonal shifting of sampling time is important since the effluent is largely derived from stormwater flow through the mining area. The additional discharge point will be subject to this same sampling twice yearly with varying seasons (see page 6 of the permit).

F. OTHER CHANGES

Permit Part III.B. lists the administrative and civil penalties for a violation of the permit as \$10,000 and \$25,000, respectively. Changes to \$11,000 and \$27,500 were published in the Federal Register [61 FR 69360, December 31, 1996]. To avoid the possibility of different levels being listed in different places, this section has been updated to include generic penalty language (see page 24 of the permit).

G. OTHER PERMIT CONDITIONS

1. Endangered Species Act (ESA)

The Endangered Species Act requires federal agencies to consult with the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) if their actions could beneficially or adversely affect any threatened or endangered species. EPA sent letters to the U.S. Fish and Wildlife Service on February 7, 2000, requesting an update of their determinations for the facility. In a letter dated February 16, 2000, the USFWS stated that they do not have any concerns regarding impacts to

peregrine falcons and that there are no other listed species that occur in the area.

2. Essential Fish Habitat (EFH)

In the February 7, 2000, letter to NMFS, EPA made a determination that the issuance of this permit modification would not affect EFH. This determination is based on personal conversation with Mr. Robert McLean, Habitat Biologist, with the Alaska Department of Fish & Game. Mr. McLean stated that no salmon species have been documented on the east side of the Nenana River and provided the raw field forms for a fish survey conducted on July 30, 1998.

3. State Certification

Section 401 of the Clean Water Act requires EPA to seek state certification before issuing a final permit. During certification, the state may require more stringent permit conditions to ensure that the permit complies with water quality standards.

4. Permit Expiration

This permit will expire five years from the effective date of the permit, but may be administratively extended if the conditions of 40 CFR §122.6(a) are met.

APPENDIX A - Acronyms & References

LIST OF ACRONYMS

AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
AWQS	Alaska Water Quality Standard
CFR	Code of Federal Regulations
EFH	Essential Fish Habitat
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FR	Federal Regulation
gpm	gallons per minute
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
TSS	Total Suspended Solids
USC	United States Code
USFWS	U.S. Fish and Wildlife Service

References

40 CFR Part 434 – Coal Mining Point Source Category

EPA, NPDES Permit Writer's Manual. Office of Water, Office of Wastewater Management, Permits Division. Washington, DC. 20460; EPA-833-B-96-003, December 1996, 220pp.

APPENDIX B - Map of Discharges